

(19)



Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 0 862 882 A1

(12)

# EUROPEAN PATENT APPLICATION

(43) Date of publication:  
09.09.1998 Bulletin 1998/37

(51) Int. Cl.<sup>6</sup>: A47J 31/40

(21) Application number: 98101852.6

(22) Date of filing: 04.02.1998

(84) Designated Contracting States:  
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC  
NL PT SE  
Designated Extension States:  
AL LT LV MK RO SI

(72) Inventor: Nello, Dal Tio  
31058 Susegana (Treviso) (IT)

(74) Representative:  
Dalla Rosa, Adriano  
Via S. Vito 13/B  
33170 Pordenone (IT)

(30) Priority: 05.02.1997 IT MI970222

(71) Applicant: C.M.A. S.p.A.  
31058 Susegana (Treviso) (IT)

(54) Express-coffee machine loadable with wafers

(57) Express-coffee-machine loadable with wafers for family or professional use including a casing (2), a unit (4) for pressing the wafer (36), into which the water is led through a boiler (16) which is arranged below said unit (4), permitting an opening from the above of said unit (4).

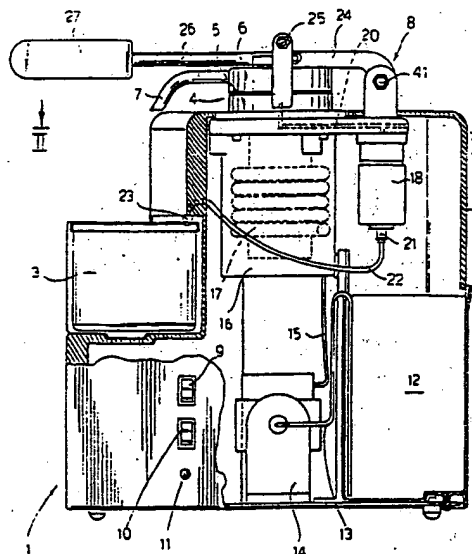


FIG. 1

EP 0 862 882 A1

illustrated in Fig. 6, the head 6 is initially lowered onto the head 5 by making a first rotation of the arm 24 hinged with the unit 4, until the head 6 engages the head 5 as Fig. 5 shows.

In order that the fork 28 is in a proper engagement position with respect to the projection 31, when the two heads 5 and 6 are into contact, the lever 26 contains a resilient element 34 (Fig. 6) in particular a spring, so that when the closing device 8 is not operating, the lever 26 is moved away of an opening angle with respect to the arm 24 and thereby permitting the fork 28, which in turn is integral with the arm 24, to attain the proper engagement position.

The opening angle of the lever 26 with respect to the arm 24 is regulated by means of blocks 35. Thereafter, a further pressure on the lever 26 causes a rotation of the lever 26 with respect to the joint 25, by engaging the cavities 30 of the lever 26 with the projections 31 of the fixed head 5.

Said cavities 30 have flared edges in order to facilitate the insertion into said projections 31. According to what explained, there are clear the advantages of the coffee machine according to the invention, which is provided with a simplified closing unit, which makes the operations of loading and cleaning thereof easier.

#### Claims

1. Express coffee machine loadable with wafers including a casing (2), a unit (4) for the pressing of the wafer (36) in which the water is led through a boiler (16), characterized in that said unit (4) includes a fixed lower head (5) and a movable upper head (6) which can be engaged and disengaged to each other by means of lever closing means (8), and that said boiler (16) is arranged below said unit (4).
2. Coffee machine according to claim 1, characterized in that said lever closing means (8) includes an arm (24) carrying said movable upper head (6), hinged at its first end portion with the structure carrying said fixed lower head (5) and connected at the other end portion by means of a joint (25) with a control lever (26).
3. Coffee machine according to claim 2, characterized in that said control lever (26) is fixed integrally with a fork (28), at the ends of which some cavities (30) engaging projections (31) provided on the fixed head (5) are provided, said cavities (30) being provided with flared edges in order to facilitate the introduction of said projections (31) therein.
4. Coffee machine according to claim 3, characterized in that said control lever (26) contains a resilient element (34), in particular a spring.

5. Coffee machine according to claim 3, characterized in that said control lever (26) co-operates with blocks (35) for regulating the opening angle of the same lever with respect to said arm (24).

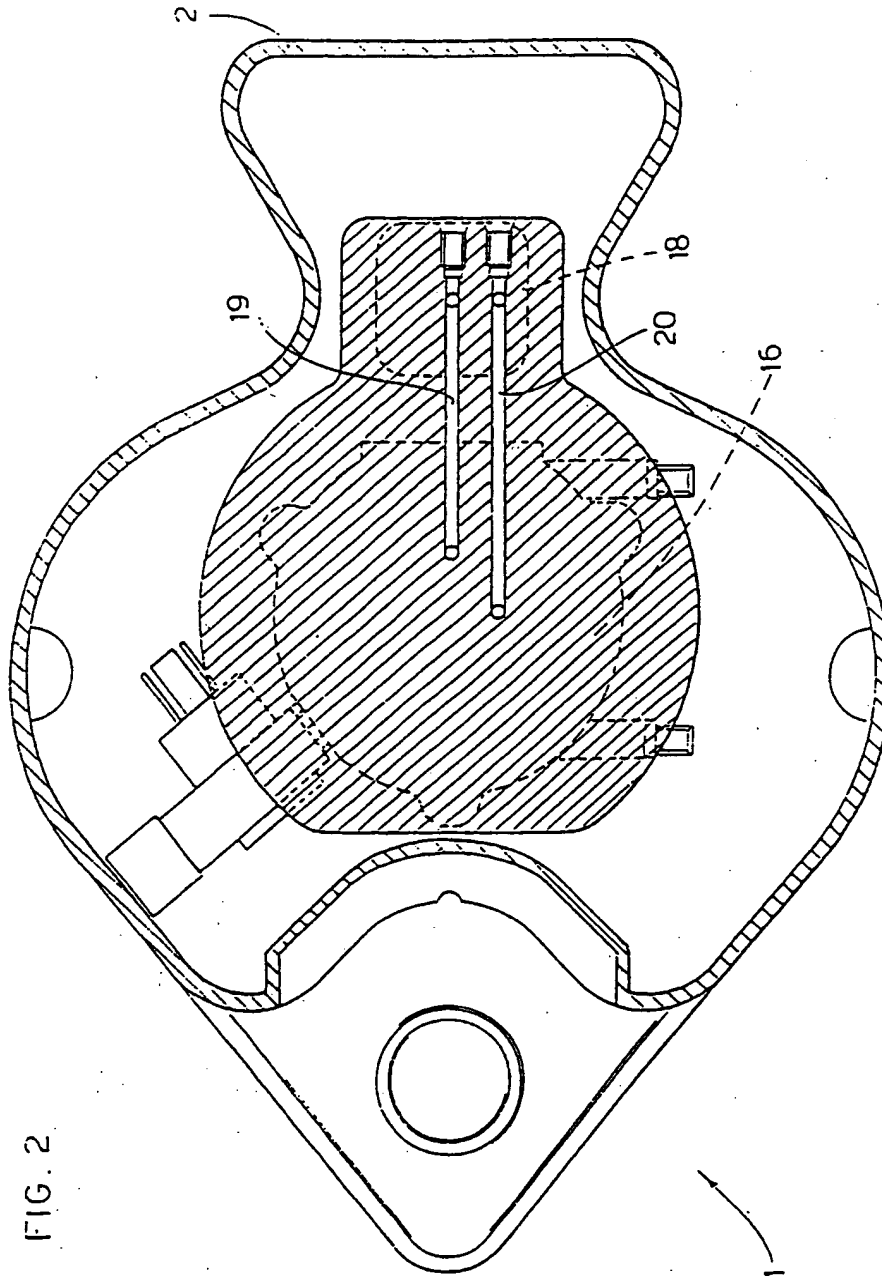
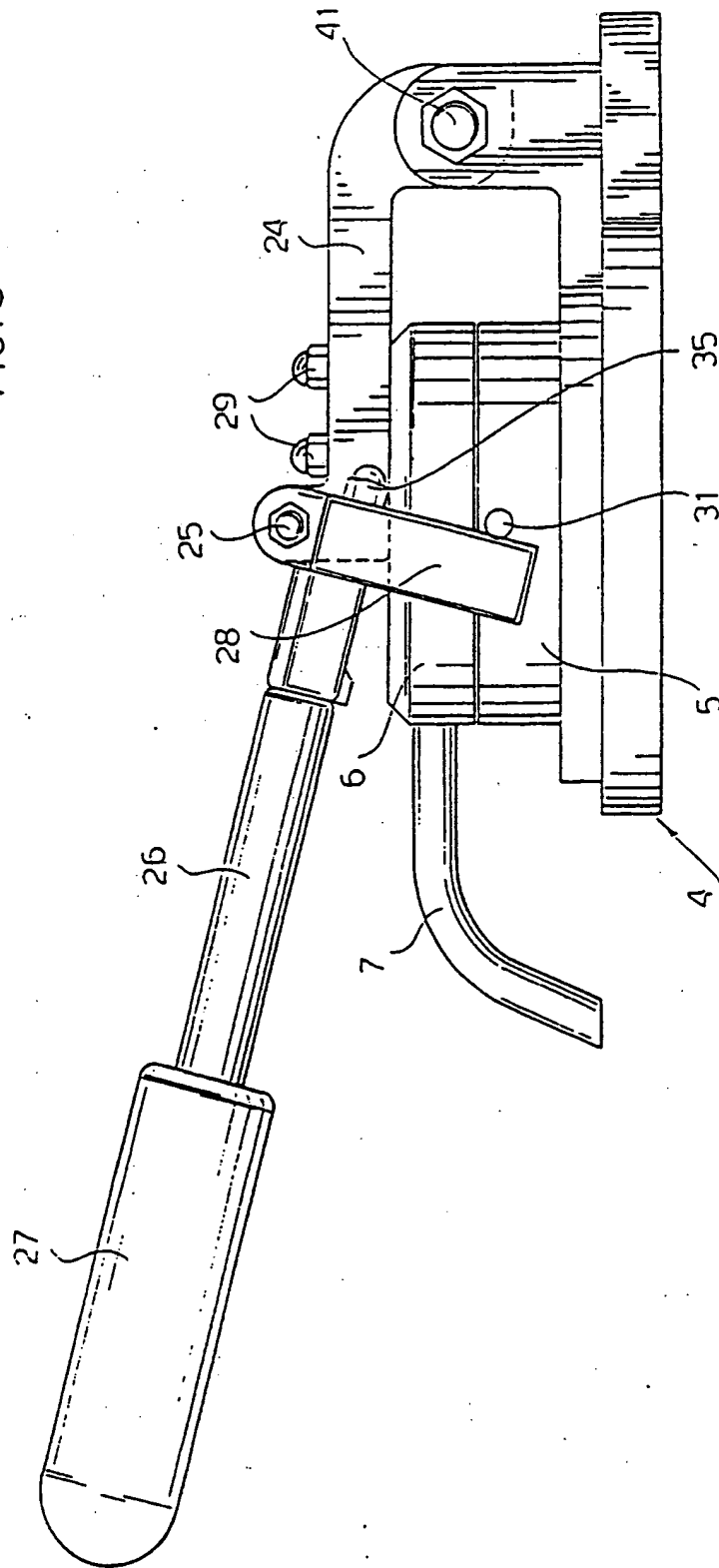


FIG. 5





European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number  
EP 98 10 1852

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	US 2 451 195 A (BROWN) 12 October 1948 * column 4, line 18 - column 8, line 19; figures 1-10 *	1-5	A47J31/40
A	US 3 007 392 A (PECORARO ET AL) 7 November 1961 * column 1, line 41 - column 4, line 48; figures 1-3 *	1-3	
A	US 5 531 152 A (GARDOSI GIANCARLO) 2 July 1996 * column 5, line 58 - column 6, line 33; figures 4,5 *	1	
A	US 3 403 617 A (LAMPE WILLY G) 1 October 1968 * column 2, line 9 - column 4, line 72; figures 1,2 *	1	
A	DE 296 01 233 U (J J DARBOVEN GMBH & CO) 13 June 1996		TECHNICAL FIELDS SEARCHED (Int.Cl.6)
A	EP 0 615 713 A (EUROMATIK SRL) 21 September 1994		A47J
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>7 May 1998</b>	Examiner <b>Bodart, P</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03/82 (PouCO1)

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☒ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**